WEST Search History

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DATE: Tuesday, May 11, 2004

Hide?	Set Name	Query	Hit Count
		DB=PGPB, USPT, EPAB, JPAB, DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ	
☐	L7	(cytomegalovirus glycoprotein O)	2
☐	L6	cytomegalovirus adj UL74	1
☐	L5	L4 and cytomegalovirus	1
☐	L4	Li L. in.	1730
☐	L3	L1 and cytomegalovirus	0
☐	L2	L1 and CMV	0
☐	L1	Britt W. in.	16

END OF SEARCH HISTORY

e b b c b c ? a e f c e

```
=> "CMV (l) UL74"
L10             0 "CMV (L) UL74"

=> UL74
L11            10 UL74

=> CMV and L11
L12             2 CMV AND L11

=> D L12 IBIB abs 1-2
```

```
=> cytomegalovirus
         10840 CYTOMEGALOVIRUS
           138 CYTOMEGALOVIRUSES
L1       10854 CYTOMEGALOVIRUS
                 (CYTOMEGALOVIRUS OR CYTOMEGALOVIRUSES)

=> compostion
            21 COMPOSTION
             8 COMPOSTIONS
L2          28 COMPOSTION
                 (COMPOSTION OR COMPOSTIONS)

=> composition
        615135 COMPOSITION
        271919 COMPOSITIONS
        881933 COMPOSITION
                 (COMPOSITION OR COMPOSITIONS)
       1276767 COMPN
        510689 COMPNS
       1562513 COMPN
                 (COMPN OR COMPNS)
L3     1995950 COMPOSITION
                 (COMPOSITION OR COMPN)

=> L3 and L1
L4          596 L3 AND L1

=> "glycoprotein O"
         87683 "GLYCOPROTEIN"
         96054 "GLYCOPROTEINS"
        134372 "GLYCOPROTEIN"
                 ("GLYCOPROTEIN" OR "GLYCOPROTEINS")
       1407013 "O"
L5           73 "GLYCOPROTEIN O"
                 ("GLYCOPROTEIN"(W)"O")

=> L4 and L5
L6            0 L4 AND L5

=> UL47
L7           51 UL47

=> L1 and L7
L8            7 L1 AND L7

=> L3 and L8
L9            1 L3 AND L8

=> L5 and L1
L10          10 L5 AND L1

=> L3 and L10
L11           0 L3 AND L10
```

```
=> cytomegalovirus
L1       39852 CYTOMEGALOVIRUS

=> "UL 47"
L2           2 "UL 47"

=> "UL47"
L3          82 "UL47"

=> "glycoprotein O"
L4         106 "GLYCOPROTEIN O"

=> "GO"
L5       55929 "GO"

=> "gO"
L6       55929 "GO"

=> L1 ans L6
MISSING OPERATOR L1 ANS
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> L1 and L6
L7          48 L1 AND L6

=> L1 and L3
L8          10 L1 AND L3

=> L1 and L4
L9          18 L1 AND L4

=> Remove duplicate L9
```

L7 ANSWER 41 OF 48 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1998:479407 BIOSIS
DOCUMENT NUMBER: PREV199800479407
TITLE: The human **cytomegalovirus** UL74 gene encodes the third component of the glycoprotein H-glycoprotein L-containing envelope complex.
AUTHOR(S): Huber, Mary T.; Compton, Teresa [Reprint author]
CORPORATE SOURCE: Dep. Med. Microbiol. Immunol., 1300 University Ave., MS493, Univ. Wisconsin-Madison Med. Sch., Madison, WI 53706-1532, USA
SOURCE: Journal of Virology, (Oct., 1998) Vol. 72, No. 10, pp. 8191-8197. print.
CODEN: JOVIAM. ISSN: 0022-538X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 5 Nov 1998
Last Updated on STN: 5 Nov 1998

TI The human **cytomegalovirus** UL74 gene encodes the third component of the glycoprotein H-glycoprotein L-containing envelope complex.

SO Journal of Virology, (Oct., 1998) Vol. 72, No. 10, pp. 8191-8197. print.
CODEN: JOVIAM. ISSN: 0022-538X.

AU Huber, Mary T.; Compton, Teresa [Reprint author]

AB The human **cytomegalovirus** (HCMV) gCIII envelope complex is composed of glycoprotein H (gH; gpUL75), glycoprotein L (gL, gpUL115), and a third, 125-kDa protein not related to gH or gL (M. T. Huber and T. Compton, J. Virol. 71:5391-5398, 1997; L. Li, J. A. Nelson, and W. J. Britt, J. Virol. 71:3090-3097, 1997). Glycosidase digestion analysis demonstrated that the 125-kDa protein was a glycoprotein containing ca. 60 kDa of N-linked oligosaccharides on a peptide backbone of 65 kDa or less. Based on these biochemical characteristics, two HCMV open reading frames, UL74 and TRL/IRL12, were identified as candidate genes for the 125-kDa glycoprotein. To identify the gene encoding the 125-kDa glycoprotein, we purified the gCIII complex, separated the components by sodium dodecyl sulfate-polyacrylamide gel electrophoresis, and subjected gH and the 125-kDa glycoprotein to amino acid microsequence analysis. Microsequencing of an internal peptide derived from purified 125-kDa glycoprotein yielded the amino acid sequence LWGPTK. A FASTA search revealed an exact match of this sequence to amino acids 188 to 195 of the predicted product of the candidate gene UL74, which we have designated glycoprotein O (**gO**). Anti-**gO** antibodies reacted in immunoblots with a protein species migrating at ca. 100 to 125 kDa in lysates of HCMV-infected cells and with 100- and 125-kDa protein species in purified virions. Anti-**gO** antibodies also immunoprecipitated the gCIII complex and recognized the 125-kDa glycoprotein component of the gCIII complex. Positional homologs of the UL74 gene were found in other betaherpesviruses, and comparisons of the predicted products of the UL74 homolog genes demonstrated a number of conserved biochemical features

L6 3

L13 2

L12 8

L11 29

L8 10

L7 ANSWER 39 OF 48 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1999:238908 BIOSIS
DOCUMENT NUMBER: PREV199900238908
TITLE: Intracellular formation and processing of the heterotrimeric gH-gL-**gO** (gCIII) glycoprotein envelope complex of human **cytomegalovirus**.
AUTHOR(S): Huber, Mary T.; Compton, Teresa [Reprint author]
CORPORATE SOURCE: Department of Medical Microbiology and Immunology, University of Wisconsin, Madison, WI, 53706, USA
SOURCE: Journal of Virology, (May, 1999) Vol. 73, No. 5, pp. 3886-3892. print.
CODEN: JOVIAM. ISSN: 0022-538X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 17 Jun 1999
Last Updated on STN: 17 Jun 1999

TI Intracellular formation and processing of the heterotrimeric gH-gL-**gO** (gCIII) glycoprotein envelope complex of human **cytomegalovirus**.

SO Journal of Virology, (May, 1999) Vol. 73, No. 5, pp. 3886-3892. print.
CODEN: JOVIAM. ISSN: 0022-538X.

AU Huber, Mary T.; Compton, Teresa [Reprint author]

AB The human **cytomegalovirus** (HCMV) gCIII complex contains glycoprotein H (gH; gpUL75), glycoprotein L (gL; gpUL115), and glycoprotein O (**gO**; gpUL74). To examine how gH, gL, and **gO** interact within HCMV-infected cells to assemble the tripartite complex, pulse-chase experiments were performed. These analyses demonstrated that gH and gL associate by the end of the pulse period to form a disulfide dependent gH-gL complex. Subsequently, the gH-gL complex interacts with a 100-kDa precursor form of **gO** to form a 220-kDa precursor of the mature gH-gL-**gO** complex that contains a 125-kDa form of **gO**. The 220-kDa precursor complex (pgCIII) was sensitive to treatment with endoglycosidase H (endo H), while the mature gCIII complex was essentially resistant to digestion with this enzyme, suggesting that formation of pgCIII complex occurs in the endoplasmic reticulum (ER) and is processed to mature gH-gL-**gO** (gCIII) in a post-ER compartment. While the N-linked glycans on the 100-kDa form of **gO** were modified to endo H-resistant states as the 125-kDa **gO** formed, additional posttranslational modifications were detected on **gO**. These processing alterations were non-N-linked oligosaccharide modifications that could not be accounted for by phosphorylation or by O-glycosylation of the type sensitive to O-glycanase. Of gH, gL, **gO**, and the various complexes that they form, only the mature form of the complex was detectable at the infected cell membrane, as judged by surface biotinylation studies.

L2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:796011 CAPLUS
DOCUMENT NUMBER: 138:218045
TITLE: The genes encoding the gCIII complex of human cytomegalovirus exist in highly diverse combinations in clinical isolates
AUTHOR(S): Rasmussen, Lucy; Geissler, Aimee; Cowan, Catherine; Chase, Amanda; Winters, Mark
CORPORATE SOURCE: Dep. Med., Stanford Univ. Sch. Med., Stanford, CA, 94305, USA
SOURCE: Journal of Virology (2002), 76(21), 10841-10848
CODEN: JOVIAM; ISSN: 0022-538X
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
ABSTRACT:
The UL74 (**glycoprotein O** [gO])-UL75 (gH)-UL115 (gL) complex of human cytomegalovirus (**CMV**), known as the gCIII complex, is likely to play an important role in the life cycle of the virus. The gH and gL proteins have been assocd. with biol. activities, such as the induction of virus-neutralizing antibody, cell-virus fusion, and cell-to-cell spread of the virus. The sequences of the 2 gH gene variants, readily recognizable by restriction endonuclease polymorphism, are well conserved among clin. isolates, but nothing is known about the sequence variability of the gL and gO genes. Sequencing of the full-length gL and gO genes was performed with 22-39 clin. isolates, as well as with lab. strains AD169, Towne, and Toledo, to det. phylogenetically based variants of the genes. The sequence information provided the basis for identifying gL and gO variants by restriction endonuclease polymorphism. The predicted gL amino acid sequences varied <2% among the isolates, but the variability of gO among the isolates approached 45%. The variants of the genes coding for gCIII in lab. strains Towne, AD169, and Toledo were different from those in most clin. isolates. When clin. isolates from different patient populations with various degrees of symptomatic ***CMV*** disease were surveyed, the gO1 variant occurred almost exclusively with the gH1 variant. The gL2 variant occurred with a significantly lower frequency in the gH1 variant group. There were no configurations of the gCIII complex that were specifically assocd. with symptomatic **CMV** disease or human immunodeficiency virus serol. status. The potential for the gCIII complex to exist in diverse genetic combinations in clin. isolates points to a new aspect that must be considered in studies of the significance of ***CMV*** strain variability.

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L6 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:408793 CAPLUS
DOCUMENT NUMBER: 138:396186
TITLE: Human **cytomegalovirus glycoprotein O** as a new drug target and subunit vaccine candidate
INVENTOR(S): Compton, Teresa; Huber, Mary T.
PATENT ASSIGNEE(S): Wisconsin Alumni Research Foundation, USA
SOURCE: U.S., 8 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6569616	B1	20030527	US 2000-627986	20000728

PRIORITY APPLN. INFO.: US 1999-146180P P 19990729
ABSTRACT:
A method of designing a new anti-CMV drug is disclosed. In one embodiment, the invention comprises (a) analyzing the binding of **glycoprotein** ***O*** to a **glycoprotein O** receptor and (b) designing a candidate drug that would competitively interfere with **glycoprotein** ***O*** binding to **glycoprotein O** receptor and (c) showing that the candidate drug competitively inhibits **glycoprotein** ***O*** binding to **glycoprotein O** receptor. A method of screening anti-CMV drugs, a vaccine effective to diminish CMV infection, and a method of diminishing CMV infection are also disclosed.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:796011 CAPLUS
DOCUMENT NUMBER: 138:218045
TITLE: The genes encoding the gCIII complex of human **cytomegalovirus** exist in highly diverse combinations in clinical isolates
AUTHOR(S): Rasmussen, Lucy; Geissler, Aimee; Cowan, Catherine; Chase, Amanda; Winters, Mark
CORPORATE SOURCE: Dep. Med., Stanford Univ. Sch. Med., Stanford, CA, 94305, USA
SOURCE: Journal of Virology (2002), 76(21), 10841-10848
CODEN: JOVIAM; ISSN: 0022-538X
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
ABSTRACT:
The UL74 (**glycoprotein O** [gO])-UL75 (gH)-UL115 (gL) complex of human **cytomegalovirus** (CMV), known as the gCIII complex, is likely to play an important role in the life cycle of the virus. The gH and gL proteins have been assocd. with biol. activities, such as the induction of virus-neutralizing antibody, cell-virus fusion, and cell-to-cell spread of the virus. The sequences of the 2 gH gene variants, readily recognizable by restriction endonuclease polymorphism, are well conserved among clin. isolates, but nothing is known about the sequence variability of the gL and gO genes. Sequencing of the full-length gL and gO genes was performed with 22-39 clin. isolates, as well as with lab. strains AD169, Towne, and Toledo, to det. phylogenetically based variants of the genes. The sequence information provided the basis for identifying gL and gO variants by restriction endonuclease polymorphism. The predicted gL amino acid sequences varied <2%

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Related Resources

Search	Most Recent Queries	Time	Result
#39	Search **gCIII complex and CMV** Field: **All Fields,** Limits: **Publication Date to 1999/07/29**	09:54:00	6
#33	Search **glycoprotein O and herpes virus** Field: **All Fields,** Limits: **Publication Date to 1999/07/29**	09:52:34	73
#35	Search **herpes virus UL74** Limits: **Publication Date to 1999/07/29**	09:46:59	0
#34	Search **glycoprotein O and herpes virus UL74** Limits: **Publication Date to 1999/07/29**	09:46:51	0
#32	Search **glycoprotein O and herpes virus**	09:44:55	100
#31	Search **glycoprotein O**	09:44:42	10303
#29	Search **Pietropaolo R 1997**	09:34:50	1
#23	Search **CMV glycoprotein O**	08:53:10	156
#26	Search **CMV glycoprotein O** Field: **All Fields,** Limits: **Publication Date to 1999/07/29**	08:52:53	103
#22	Search **CMV and glycoprotein O**	08:40:23	156
#19	Search **Britt W and glycoprotein O**	08:38:04	3
#18	Search **Britt W and UL74**	08:37:52	0
#17	Search **Britt W and CMV UL74**	08:37:47	0
#16	Search **Britt W and CMV**	08:37:11	93
#15	Search **Li L and CMV**	08:36:18	9
#13	Search **Li L 1997 and CMV**	08:21:34	1
#12	Search **Huber M and CMV**	08:20:56	7
#10	Search **Huber M 1997 and CMV**	08:18:49	2
#9	Search **Huber M 1997**	08:18:41	32
#6	Search **gretch D and CMV**	08:17:34	7
#5	Search **gretch D**	08:17:24	92
#1	Search **gretch D 1988**	08:14:20	3

Clear History

NCBI PubMed National Library of Medicine NLM

Entrez PubMed Nucleotide Protein Genome Structure OMIM PMC Journals

Search PubMed for CMV glycoprotein O Preview

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To combine searches use # before search number, e.g., #2 AND #6.
Search numbers may not be continuous; all searches are represented.
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Search	Most Recent Queries	Time	Result
#26	Search **CMV glycoprotein O** Field: **All Fields,** Limits: **Publication Date to 1999/07/29**	08:50:27	103
#23	Search **CMV glycoprotein O**	08:40:37	156
#22	Search **CMV and glycoprotein O**	08:40:23	156
#19	Search **Britt W and glycoprotein O**	08:38:04	3
#18	Search **Britt W and UL74**	08:37:52	0
#17	Search **Britt W and CMV UL74**	08:37:47	0
#16	Search **Britt W and CMV**	08:37:11	93
#15	Search **Li L and CMV**	08:36:18	9
#13	Search **Li L 1997 and CMV**	08:21:34	1
#12	Search **Huber M and CMV**	08:20:56	7
#10	Search **Huber M 1997 and CMV**	08:18:49	2
#9	Search **Huber M 1997**	08:18:41	32
#6	Search **gretch D and CMV**	08:17:34	7
#5	Search **gretch D**	08:17:24	92
#1	Search **gretch D 1988**	08:14:20	3

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